

AMENDMENTS TO THE SPECIFICATION

Please change the specification as follows:

Page 1, paragraph [04]

In satellite communications systems as illustrated in Fig. 5, signals are typically beamed between satellites 100 and fixed coverage region(s) on the Earth 102 using these beams of concentrated radiation. Bandwidth is often a limited resource, and has to be used efficiently. In order to cover such large regions and reuse the same frequency, the use of a multiple beam phased array antenna 101 has been discovered to be an effective solution. Beam coverage from the phased array antenna 101 is accomplished by producing a number of spot beams 104 directed towards specific areas 103 of the coverage region. These spot beams 104 are generated by energizing radiating elements of the phased array antenna with selected amplitudes and phases, and can be realized by the use of a Digital Beam Former (DBF).

Page 3, paragraph [19]

The system for creating multiple-beams is illustrated in Fig. 1. The transmitter 1 is made up of a common path having a down converter (D/C), analog to digital converter (A/D) and demultiplexer (DEMUX), leading to plural parallel paths having radiating elements 4a, 4b, power amplifiers 2a, 2b, and a DBF 6a, 6b. The combination of the radiation created by the antenna elements 4a, 4b and the steering of this radiation by the DBF 6a, 6b creates multiple spot beams according to the present invention.